BRUHAT BANGALORE MAHANAGARA PALIKE

Yelahanka Zone, Electrical Division

Name of Work:- Detailed Estimate for Providing and installation of Decorative Tuskar street light poles and lights from Thirumala dhabha to M S Palya Circle in ward no 03.

								Est Cost	25000000.00	
SR No	Page	Description Of Work	Unit	No	L,m	B,m	D,m	Qty	Rate	Amount
		Removing and resetting of footpath Slab (Approved arrival Rate)								
		Major Sandeep unnikrishnana Road	Sqm							
		From Thirumala Daba		2	700.00	0.90		1260.00		
		Consider 50%						630.00		
		Deduct 30% for Damaged/Missing Slab						315.00		
		Basic rate 235.00								
		Add 10% A.W 23.5								
		Total 258.50				Total Qnty		315.00	258.50	81427.50
		Removing and resetting of Kerb Stone (Approved arrival Rate)								
		Major Sandeep unnikrishnana Road	m							
		From Thirumala Daba		4	700.00			2800.00		
		Consider 60%						1680.00		
		Deduct 35% for Damaged/Missing Slab						588.00		
		Basic rate 118.00								
		Add 10% A.W 11.8								
		Total 129.80				Total Qnty		1092.00	129.80	141741.60
		Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Loading and Unloading of Stone Boulder/Stone aggregates/ Sand/Kankar/Moorum. (Tipper 14 m3)(V-I.No 1.4,Page No-5 PWD SR 2021-22) & (V-III Page No.3, Item No.1.1 Cof PWD SR 2021-22)								
		Major Sandeep unnikrishnana Road	Cum							
		From Thirumala Daba								
		For Pole Pedestral		83	1.30	0.40	1.20	51.79		
		Desilt								
		Major Sandeep unnikrishnana Road								
		From Thirumala Daba								
				2	700.00	0.60	0.30	252.00		
		Basic rate 186.00								
		Loading and Unloading 74.00								

SR No. Page	Description Of Work		Unit	No	L,m	B,m	D,m	Qty	Rate	Amount
		260.00								
	Add 10% A.W	26.00								
	Total	**286.00**				Total Qnty		303.79	286.00	86884.51
	Cost of Haulage Excluding Loading and Unloading Taking output 25 t load and lead 10 km = 250 t.km (V-III Page No.3, Item No.1.4C of PWD SR 2021-22) 5 rs /km= 8km = 5*8 = 40									
	Qty frm Item No-3		T.km	1	303.79	1.28		388.85		
	Basic rate	40.00								
	Add 10% A.W	4								
	Total	**44.00**				Total Qnty		388.85	44.00	17109.57
	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregates (V-I Page No.15, Item No.2.1.4 of PWD SR 2021-22)									
	Major Sandeep unnikrishnana Road		Cum							
	From Thirumala Daba									
	For Below Kerb Stone			2	1680.00	0.20	0.125	84.00		
	Basic rate	5926.00								
	Add 10% A.W	592.6								
	Total	**6518.60**				Total Qnty		84.00	6518.60	547562.40
	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates (V-1, P.No-15, I No-2.1.3 of PWD SR 2021-22)									
	Major Sandeep unnikrishnana Road		Cum							
	From Thirumala Daba									
	For Pole Pedestral			83	1.30	0.40	0.15	6.47		
	Basic rate	5752.00								
	Add 10% A.W	575.2								
	Total	**6327.20**				Total Qnty		6.47	6327.20	40962.29
	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (V-1,P.No.17, I.No.2.4.2 of PWD SR 2021-22)									

SR No	Description Of Work		Unit	No	L,m	B,m	D,m	Qty	Rate	Amount
	Major Sandeep unnikrishnana Road		Cum							
	From Thirumala Daba									
	For Pole Pedestral			83	1.30	0.30	1.50	48.56		
	Basic rate	6256.00								
	Shuttering 5%	312.80								
		6568.80								
	Add 10% A.W	656.88								
	Total	**7225.68**				Total Qnty		48.56	7225.68	350842.89
	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.(V-III, I.No 13.1 Page No 99, PWD SR 2021-22)									
	Major Sandeep unnikrishnana Road		Ton							
	From Thirumala Daba									
	For Pole Pedestral		83	14	1.35	0.89		1396.14		
	Basic rate	103329.00	83	6	2.90	0.61		880.96		
	Add 10% A.W	10332.9						2277.11		
	Total	**113661.90**				Total Qnty		2.28	113661.90	258820.08
	Providing and Fixing Pre cast covering Slab 100mm thick made out of CC, jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge.									
	Major Sandeep unnikrishnana Road		Sqm							
	From Thirumala Daba									
	From item no. 01							315.00		
	Data rate	2299.00								
						Total Qnty		315.00	2299.00	724185.00
	Providing and fixing pre cast solid cement concrete kerb stones made out of CC M20 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete.									
	Major Sandeep unnikrishnana Road		Nos							
	From Thirumala Daba									
	From item no. 02							588.00		
	Data rate	502.00								
						Total Qnty		1306.67	502.00	655946.67
	Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces (V-III, P.No.56, I.No.8.10 of PW, PWD SR 2021-22)									
	Major Sandeep unnikrishnana Road		Sqm							
	From Thirumala Daba									
				4	700.00		0.30	840.00		
	Basic rate	85.00								
	Add 10% A.W	8.5								

SR. No.	Description Of Work		Unit	No	L,m	B,m	D,m	Qty	Rate	Amount
	Total	**93.50**				Total Qnty		1866.67	85.00	158666.67
7	ST/1 2.8.4	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Streetlight 90 Watts									
			Nos	1	50.00			50.00	7160.00	358000.00
8	ST/1 2.8.5	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Streetlight 120 Watts									
			Nos	1	50.00			50.00	9200.00	460000.00